

09738715.121600

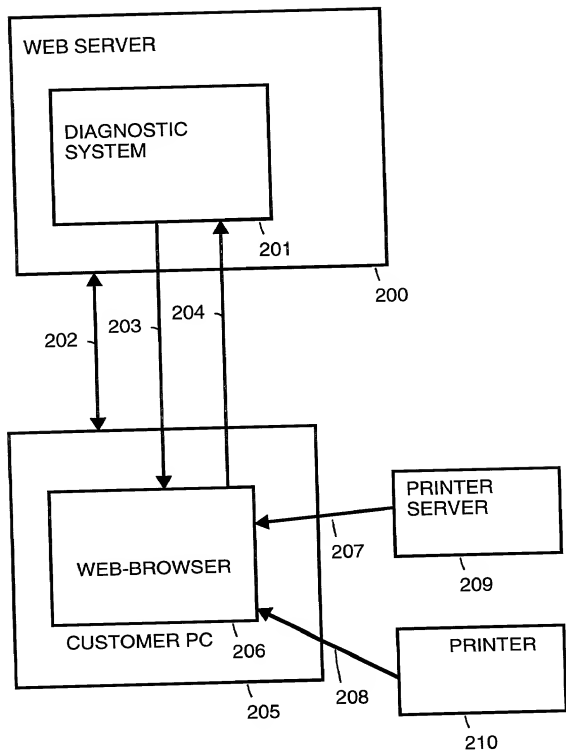
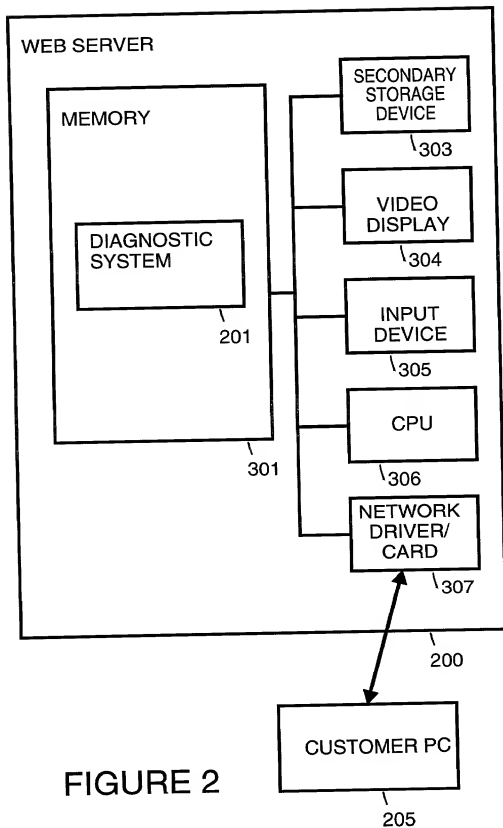


FIGURE 1

00738716.121600



09738716-121600

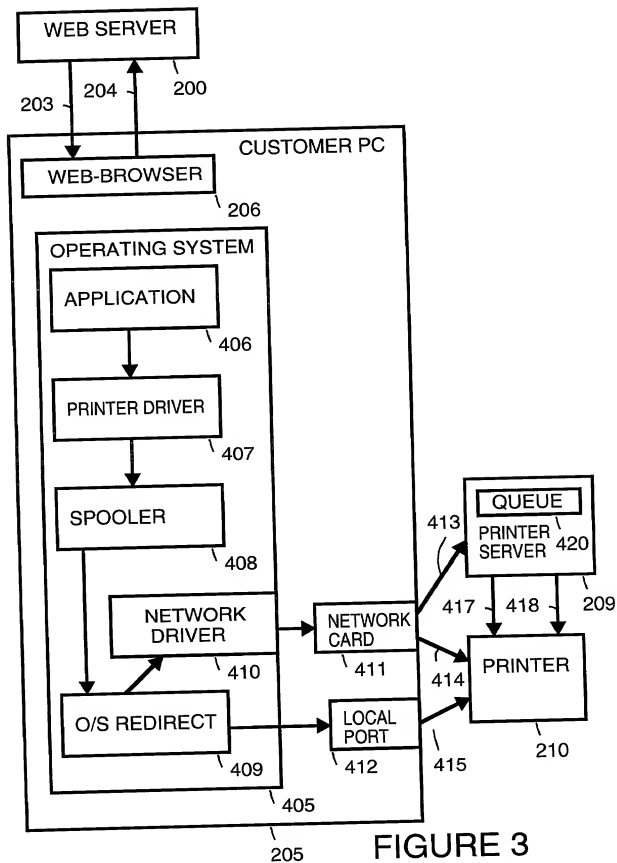


FIGURE 3

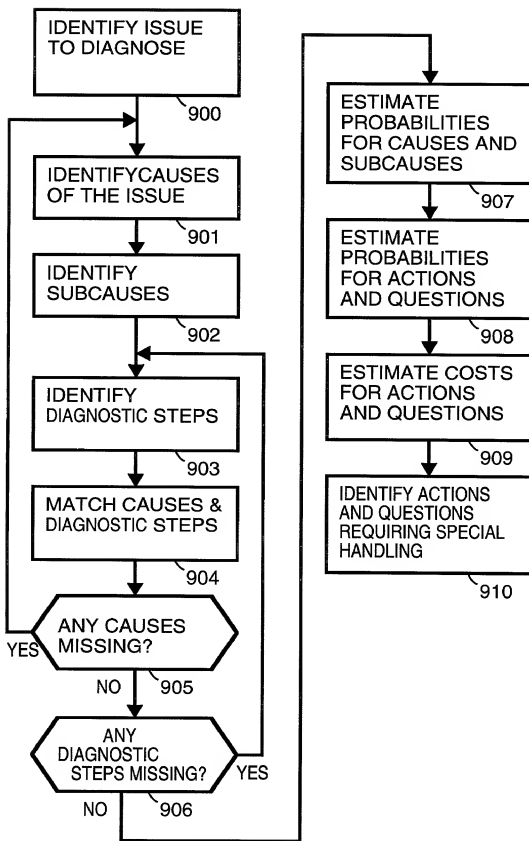


FIGURE 4

Main window

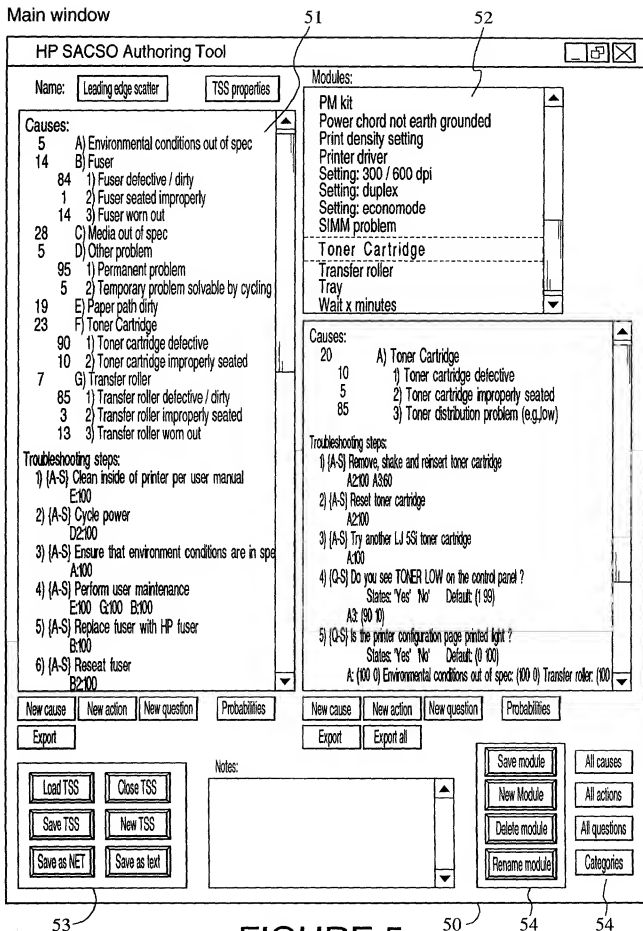


FIGURE 5

Cause editor

009121-5173E260

Cause Editor [X]

Name: 61

62 ☐ Subcause of: 62

Probability: 63

Explanation 64

Categories 65

Dataflow

66 ☒ This cause is a consumable (toner cartridge, fuser, transfer roller or feed and separation rollers).

67 ☐ Automatic data collection possible.

68 ☐ Can be fixed by rebooting the PC.

69 ☐ Can be fixed by power cycling the printer.

Dependency of environment:

Printer

Operating system

Printer driver

Network

Paper handling devices

 78

Name of cause given to customers:

Delete cause

OK

Cancel

FIGURE 6

Cause probability editor

Cause Probability Editor

Select level and causes:

- Environmental conditions out of spec
- Fuser
- Fuser defective / dirty
- Fuser seated improperly
- Fuser worn out
- Media out of spec
- Other problem
- Permanent problem
- Temporary problem solvable by cycling
- Paper path dirty
- Toner Cartridge
- Toner cartridge defective
- Toner cartridge improperly seated

Set probabilities:

Fuser defective / dirty	84.29
Fuser seated improperly	1.429
Fuser worn out	14.29

Normalize

OK Cancel

71

72

70

FIGURE 7

Cause category editor

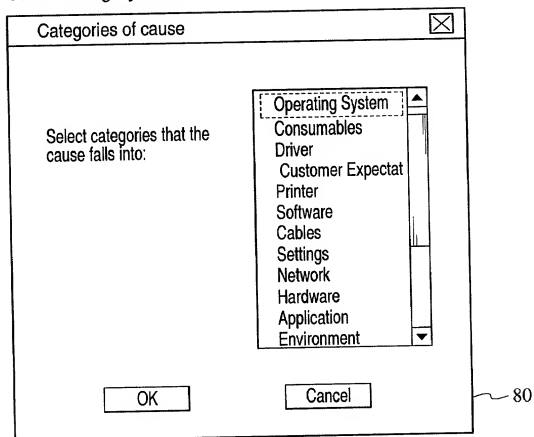


FIGURE 8

Action editor

Action Editor

Name: Perform user maintenance

Type: Solution action
Information gathering action

93 ☐ Action is forced as number: 0

94 ☐ Workaround.

With probability:

100
100
100

Causes "solved" by the action:

Paper path dirty
Transfer roller
Fuser

96 Edit costs, ...

95 Explanation

97 Extra Information

☐ Reverse action - tests a single component in different environment

Probability that it works if none of the above causes are present: 0

98 Remove action

99

100

101

OK Cancel

FIGURE 9

Extra information editor for actions

Extra information for actions

Perform user maintenance

This action includes the following actions:

- Clean inside of printer per user manual
- Reset fuser
- Reset transfer roller

Add actions Remove actions

This action is mutually exclusive with the following actions:

Add actions Remove actions

☒ This action can only be performed after a specific question has been answered.

Question: Is the user maintenance due? ▼

State: Yes ▼

☐ This action can only be performed after a specific question has been answered.

Question: Did you recently perform the user maintenai? ▼

State: Yes ▼

☐ If this action is performed, the following question should be fired in the specified state.

Question: Did you recently perform the user maintenai? ▼

State: Yes ▼

☐ This action includes moving a component, and will also solve the problem if this component was sealed improperly.

Component (sealed improperly): ▼

☐ The component should not be moved back in place afterwards.

Dependency of environment:

- Printer
- Operating system
- Printer driver
- Network
- Paper handling devices

☒ This action includes powering cycling the printer.

☐ This action includes rebooting the customer's PC.

☐ This action is irreversible.

☐ Automatic data collection possible.

OK Cancel

FIGURE 10

Action probability editor

Probability of action

Assuming that

is the only cause of

what is the probability that correctly performing the step

will solve the problem?

110

FIGURE 11

General question editor

General question

Name: Did you recently perform the user maintenance?

States:

Yes	8
No	92

Add State

Normalize

Explanation

Edit costs, ...

Extra information

Remove question

Probability changes for causes:

- 5 Temporary problem solvable by cycling power
- 5 Environmental conditions out of spec
- 28 Media out of spec
- 7 Transfer roller
- 13 Transfer roller worn out
- 3 -> 25 Transfer roller improperly seated
- 85 Transfer roller defective / dirty
- 14 Fuser
- 14 Fuser worn out
- 84 Fuser defective / dirty
- 1 -> 15 Fuser seated improperly

Remove change

☐ Question is forced as number: 0

OK Cancel

FIGURE 12

Probability change editor

Probability Change Editor

Question: Did you recently perform the user mal

Cause: Transfer roller improperly seated

State: Yes

Old probability: 2.5

New probability: 25

OK

Cancel

FIGURE 13

Symptom question editor

☐ Symptom question

Name:

States:

Yes	141
No	142

Causes:

Toner cartridge	148
Environmental conditions out of spec.	140
Transfer roller	149

Probabilities of states if none of the specified causes are present:

0	100
---	-----

☐ Question is forced as number:

Probabilities of states given the cause:

100	0
100	0
100	0

FIGURE 14

Cause editor for actions and questions

Cost Editor

Step: Perform user maintenance

Time: 25 (minutes) ☐ Idle time?

Risk: High

Money: 0

Insult: 0

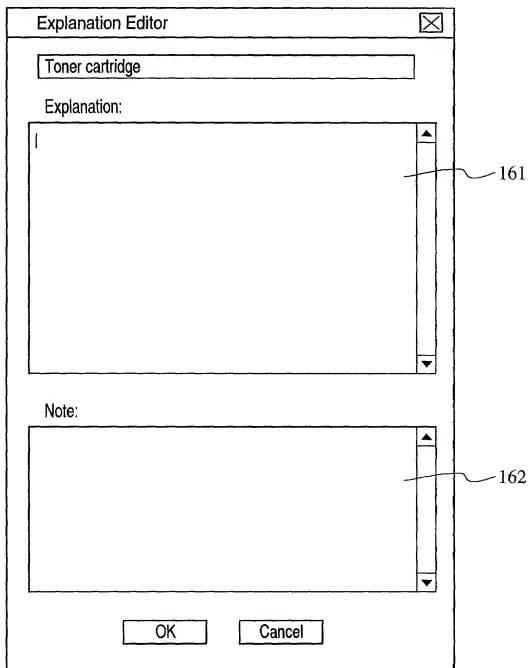
Inaccuracy: Medium

OK Cancel

152 153 154 155 156 157 150

FIGURE 15

Explanation editor for causes, actions and questions



The image shows a dialog box titled "Explanation Editor" with a close button (X) in the top right corner. Inside the dialog, there is a text input field containing the text "Toner cartridge". Below this field, there are two sections: "Explanation:" and "Note:". Each section has a large rectangular text area for input. The "Explanation:" text area is labeled with the reference number 161, and the "Note:" text area is labeled with the reference number 162. Both text areas have vertical scroll bars on their right sides. At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

Explanation Editor

Toner cartridge

Explanation:

Note:

OK Cancel

161

162

FIGURE 16